Committee on Earth Observation Satellites 17th Plenary Meeting Colorado Springs, Colorado November 19-20, 2003 CEOS/17/WgEdu

**Item 11.3** 

Submitted by Sergio Camacho Chair, CEOS ad hoc Working Group on Earth Observation Education and Training

## Draft Ad hoc Guidelines for providing Earth Observation data for Education and Capacity Building

#### SUMMARY AND PURPOSE

The CEOS ad hoc Working Group on Education and Training in Earth Observation (WGEdu) and Module 1 of the CEOS WSSD Follow up Programme (Module 1) have prepared a set of draft data principles for education, training and capacity building purposes. If adopted by CEOS Plenary, the draft data principles would encourage satellite operators to provide limited amounts of data or data sets, on a voluntary basis and consistent with agency data policies, for specific education and training data requests received from recognized capacity building institutions. Recognizing that a framework and mechanism(s) to facilitate the provision of satellite data for specific and well-defined capacity building purposes are necessary and that these would take time to develop, the WGEdu also prepared draft *ad hoc* supplementary implementation guidelines for possible consideration by CEOS Plenary. If adopted, these guidelines would make it possible for satellite operators to begin providing data sets for capacity building, particularly in developing countries throughout 2004. Initial emphasis could be placed on supporting follow up actions to be undertaken by Module 2 of the CEOS WSSD Follow up Programme.

### ACTION PROPOSED

CEOS Plenary is invited to review the Draft *Ad hoc* Guidelines for providing Earth Observation data for Education and Capacity Building, in conjunction with the Draft Principles of Satellite Data Provision in support of Earth observation. In particular, CEOS Plenary is invited to:

- 1. Discuss and modify/approve the draft guidelines for providing Earth Observation data for Education and Capacity Building;
- 2. Establish a Sub-committee/group of satellite data experts from CEOS Members to evaluate requests received from capacity building institutions and to channel the requests to satellite operators for possible implementation; and
- 3. Provide guidance on the preparation of a definite framework and implementation mechanism(s).

# Draft $Ad\ hoc$ Guidelines for providing Earth Observation data for Education and Capacity Building $^1$

(Supplemental Document to the Draft Principles of Satellite Data Provision in Support of Earth Observation Education and Training)

 $<sup>^{\</sup>rm 1}$  Proposal by the CEOS ad hoc Working Group  $\,$  on Education and Training in Earth Observation

### Ad hoc Guidelines for providing Earth Observation data for Education and Capacity building

The CEOS Strategy for Earth Observation Training and Education, adopted by the 15<sup>th</sup> Plenary in Kyoto, Japan, in 2001, states:

"The CEOS strategy for Earth observation education and training is to establish an effective coordination and partnership mechanism among CEOS agencies and institutions offering education and training around the world. The key objective of the strategy is to facilitate activities that substantially enhance international education and training in Earth observation techniques, data analysis, interpretation, use and application."

One step in the implementation of this strategy is to make a limited amount of satellite data available for education and training purposes on a routine basis. The intent is to increase the quality and quantity of satellite data available to educators and educational institutions with the goal to increase the cadre of trained professionals entering the workforce.

The CEOS ad hoc Working Group for Education and Training in Earth Observation (WGEdu) has proposed the adoption by CEOS of the draft Principles of Satellite Data Provision in Support of Earth Observation Education and Training" (Report of the WGEdu to 17<sup>th</sup> CEOS Plenary). This supplemental document provides guidelines for providing data under the principles, which when adopted, will allow a coordination process to facilitate a fair and equitable distribution of data made available by the satellite operators in accordance with their own data policies, and the previous data policies already adopted by CEOS. These guidelines do not commit any satellite operator to providing data nor restrict them in any way from distributing data for training and education under their own or other programmes.

WGEdu recommends that three levels of data provision be considered:

- 1. Available archived data
- 2. Data on priority issues and geographic regions archive
- 3. Real-time or near real time (by specific proposal only)
- **1. Archive data**: These would be data or data sets that already exist in archives of the satellite operators and others (historic data). A catalogue, with a search capability, of those data sets already available from diverse sources would be developed and could be made accessible through the WGEdu web site.
- **2. Priority issues and geographic regions archive:** New, more application- or region-specific data sets could be included in this Archive at the discretion of the satellite operators. The intention would be to provide recent data in thematic areas that respond to global priorities, and possibly on specific geographic regions, recommended by the WGEdu and its partnerships with the CEOS WSSD Follow up Programme, the IGOS-P, the United Nations system and others. The partners would assist in determining the recommend priority thematic areas or geographic regions.

**3. Real-time or near-real time data (by proposal only):** This third type of provision would be facilitated on the basis of a yearly, or possibly bi-yearly, invitation for proposals. WGEdu would work with a "Sub-committee", whose establishment would be agreed to by CEOS Plenary, to develop a set of criteria for merit-based selection of proposals and a long-term mechanism for data distribution (for membership of the Sub-committee, please see "Other considerations" below). Satellite operators could "identify" on a yearly or on-going basis, the type and quantity of data they would be willing to provide for each proposal announcement. The WGEdu could facilitate this process and the availability of data could be announced on its web site.

### Other Considerations related to proposals for real-time or near-real time data

**How:** Once a year an announcement that limited amounts of satellite data are available would be made through both the CEOS WGEdu web site and as an e-mail distribution to "registered" educational institutions. The web site will ensure that "the opportunity" is open to all, not just those "registered" institutions. Once experience is gained, the announcement could be made twice a year.

**How much data**: At their discretion, interested satellite operators could "pledge" the maximum quantity of data per announcement that would be made available through the WGEdu for education and training purposes.

**Who decides:** A small Sub-committee (5·7 people) would be responsible to evaluate all the proposals received. In order to share the work involved, the Sub-committee would be made up of a group of individuals from among CEOS Members, and possibly Associates, on a rotating basis.

Who is on the Sub-committee: Membership in the Sub-committee would be agreed upon at each CEOS Plenary, and a Chair for that year would be selected. The Chair would be responsible for ensuring that the call for proposals is sent. The WGEdu would facilitate the preparation of all the materials. The Chair would distribute the incoming proposals to the Sub-committee members and the evaluation and ranking of proposals would be done based on established criteria. As applicable, the satellite operators would distribute the data to the successful proposals.

**Evaluation Criteria for proposals:** The criteria could include, anticipated impact on education and training, data requirements, availability of local funding and human resources, partnerships, possibilities for support of on-going capacity building projects and follow up activities (in the case of demonstration or pilot projects).

**Feedback:** Recipients of any data provided under the CEOS Principles of Satellite Data Provision in Support of Earth Observation Education and Training would be invited to report on the purpose for which the data was utilized, results reached, number of beneficiaries and observations on the usefulness of the data. Reporting would be an essential condition for institutions to be considered as "registered" institutions. . WGEdu will forward to relevant satellite operators the feedback received and possible related comments that they would feel appropriate